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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/590,495	01/16/2007	Nobuyuki Yokosawa	295224US0PCT	1078
22850	7590	07/16/2009		
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314				
EXAMINER WILLIAMS, JOSEPH L				
ART UNIT		PAPER NUMBER		
2889				
NOTIFICATION DATE		DELIVERY MODE		
07/16/2009		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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### Office Action Summary

**Application No.**

10/590,495

**Applicant(s)**

YOKOSAWA ET AL.

**Examiner**

Joseph L. Williams

**Art Unit**

2889

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 7-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 7-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SI/ICE)
- Paper No(s)/Mail Date 11/06/2007
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Specification***

1. The abstract of the disclosure is objected to because of the use of the legalese language "comprising". Correction is required. See MPEP § 608.01(b).

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 7-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Suzuki et al. (JP-2003-342563), of record by Applicant. (Please note that the Examiner used a computer generated English translation from the JPO website).

Regarding claim 7, Suzuki ('563) teaches throughout the text a green light-emitting phosphor for a display, comprising a manganese-activated zinc silicate phosphor and being excited by an electron beam whose acceleration voltage is 15 kV or less to emit green light, wherein the manganese-activated zinc silicate phosphor is composed of particles having an average particle size of 1.0 to 2.0 microns.

Regarding claim 8, Suzuki ('563) teaches a 50%D value of a particle size distribution that a weight-integrated distribution of a particle size of the manganese-activated zinc silicate phosphor is 50%, is 2.0 to 3.0 microns.

Regarding claim 9, Suzuki ('563) teaches a ratio of the 50%D value of the particle size distribution and the average particle size of the manganese-activated zinc silicate phosphor is 1.0 to 2.0.

Regarding claim 10, Suzuki ('563) teaches the manganese-activated zinc silicate phosphor has an afterglow time of 8 ms or less (property of the phosphor).

Regarding claim 11, Suzuki ('563) teaches a phosphor layer including a blue light-emitting phosphor layer, a green light-emitting phosphor layer and a red light-emitting phosphor layer; an electron emitting source which emits an electron beam having an acceleration voltage of 15 kV or less onto the phosphor layer to make it to emit light; and an envelope which vacuum-seals the electron emitting source and the phosphor layer, wherein the green light-emitting phosphor layer includes the green light-emitting phosphor for a display as set forth in claim 7.

Regarding claim 12, Suzuki ('563) teaches the green light-emitting phosphor layer has a thickness of 1 to 10 microns.

Regarding claim 13, Suzuki ('563) teaches the manganese-activated zinc silicate phosphor has an afterglow time of 8 ms or less.

Regarding claim 14, Suzuki ('563) teaches the manganese-activated zinc silicate phosphor has an afterglow time of 8 ms or less.

Regarding claim 15, Suzuki ('563) teaches a field-emission display, comprising: a phosphor layer including a blue light-emitting phosphor layer, a green light-emitting phosphor layer and a red light-emitting phosphor layer; an

Art Unit: 2889

electron emitting source which emits an electron beam having an acceleration voltage of 15 kV or less onto the phosphor layer to make it to emit light; and an envelope which vacuum-seals the electron emitting source and the phosphor layer, wherein the green light-emitting phosphor layer includes the green light-emitting phosphor for a display as set forth in claim 8.

Regarding claim 16, Suzuki ('563) teaches field-emission display, comprising: a phosphor layer including a blue light-emitting phosphor layer, a green light-emitting phosphor layer and a red light-emitting phosphor layer; an electron emitting source which emits an electron beam having an acceleration voltage of 15 kV or less onto the phosphor layer to make it to emit light; and an envelope which vacuum-seals the electron emitting source and the phosphor layer, wherein the green light-emitting phosphor layer includes the green light-emitting phosphor for a display as set forth in claim 9.

Regarding claim 17, Suzuki ('563) teaches a field-emission display, comprising: a phosphor layer including a blue light-emitting phosphor layer, a green light-emitting phosphor layer and a red light-emitting phosphor layer; an electron emitting source which emits an electron beam having an acceleration voltage of 15 kV or less onto the phosphor layer to make it to emit light; and an envelope which vacuum-seals the electron emitting source and the phosphor layer, wherein the green light-emitting phosphor layer includes the green light-emitting phosphor for a display as set forth in claim 10.

***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph L. Williams whose telephone number is (571) 272-2465. The examiner can normally be reached on M-F (6:30 AM-3:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Minh-Toan Ton can be reached on (571) 272-2303. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Joseph L. Williams/  
Primary Examiner, Art Unit 2889